

REMARKS/ARGUMENTS

Status of the Claims

Claims 2-17, 19-28 and 31-34 remain in the application. Claims 1 and 30 have been cancelled.

Amendments to the Claims

Dependent claims 2 and 31 have been rewritten in independent form by incorporating the subject matter of claims 1 and 30, respectively.

Independent claim 25 has been amended to incorporate subject matter similar to claim 2.

Claims 8, 10, 11, 14-16, 19 and 21-24 have been amended to be dependent upon claim 2.

Claim 13 has been amended to replace the expression "an P2P request" with "a P2P request".

35 U.S.C. § 102 Rejections

Controlling case law has frequently addressed rejections under 35 U.S.C. § 102. "For a prior art reference to anticipate in terms of 35 U.S.C. Section 102, **every element** of the claimed invention **must** be **identically** shown in a single reference." Diversitech Corp. v. Century Steps, Inc., 850 F.2d 675, 677, 7 U.S.P.Q.2d 1315, 1317 (Fed. Cir. 1988; emphasis added). The disclosed elements must be arranged as in the claim under review. See Lindemann Machinefabrik v. American Hoist & Derrick Co., 730 F.2d 1452, 1458, 221 U.S.P.Q. 481, 485 (Fed. Cir. 1984). If any claim, element, or step is absent from the reference that is being relied upon, there is **no** anticipation. Kloster Speedsteel AB v. Crucible, Inc., 793 F.2d 1565, 230 U.S.P.Q. 81 (Fed. Cir. 1986; emphasis added). The following analysis of the present rejections is respectfully offered with guidance from the foregoing controlling case law decisions.

The Examiner has rejected claims 1-8, 10-17, 25-28, 30-32 and 34 under 35 U.S.C. 102(e) as being anticipated by Li et al. (US Patent No. 7,286,842).

With regard to independent claim 2, there is no discussion in Li et al. of the use of a downlink PMP band and an uplink PMP band in the manner claimed. In particular, the device claimed in claim 2 uses the downlink and uplink PMP bands respectively for receiving and transmitting in PMP mode, but uses only the PMP uplink band for both transmitting and receiving while in wireless P2P mode. There is no suggestion or disclosure of such a limitation in Li et al. Li et al. merely refers to FORWARD links and BACKWARD links in the P2P dedicated channel, but not whether the FORWARD links and BACKWARD links in the P2P dedicated channel are on an uplink PMP band in the manner claimed in the present application.

In addition, claim 2 defines the “cellular spectral resource comprises a downlink PMP band, and an uplink PMP band”. This indicates a frequency division duplex (FDD) mode in which separate spectrum is used for uplink and downlink. Li et al. does not disclose a FDD mode, but discloses only a time division duplex mode (TDD) in a single band, i.e. one carrier frequency, as indicated at column 1 lines 45-55, “Among existing 3G systems based on TDD communication mode, TD-SCDMA (Time Division-Synchronization Code Division Multiple Access) system is the most suitable system for the combination of P2P communication with conventional communication mode, because the same carrier frequency is applied in both uplink and downlink communications, which can simplify the RF (Radio Frequency) module of the mobile terminal” (emphasis added).

For at least the above reasons, Applicant submits that Li et al. does not identically disclose all of the limitations of claim 2, and therefore Li et al. does not anticipate claim 2.

The same arguments apply to claims 25 and 31.

As Li et al. does not identically disclose all of the limitations of claims 2, 25 and 31 for at least the reasons discussed above, Applicant submits that claims 2, 25 and 31 are novel over Li et al. Applicant respectfully requests that the Examiner reconsider and withdraw the 35 U.S.C 102 rejection.

Claims 3-7 are dependent upon claim 2, either directly or indirectly, and based on this dependence, and for the reasons provided above, Applicant respectfully submits that these claims are novel over Li et al.

Furthermore, with respect to claim 3, claim 3 recites “a first receiver for receiving PMP communications on the downlink PMP band” and “a second receiver for receiving P2P communications on the uplink PMP band”. Li et al. discloses only a single receiver and so does not disclose what is recited in claim 3.

Claims 8, 10, 11, 14, 15 and 16 have been amended to be dependent upon claim 2, and therefore are allowable for at least the above reasons.

Furthermore with regard to claim 8, in the 35 U.S.C. 103(a) rejection raised in the Office Action with respect to claim 33, which recites similar subject matter to claim 8, the Examiner states that Li et al. does not disclose “maintaining linked state transitions between states for PMP communications and at least one state for P2P communications”. Therefore, by the Examiner’s own rejection of claim 33 it is conceded that claim 8 is novel over Li et al.

Claims 12, 13, 17, 26 to 28 and 32 to 34 are dependent upon claims 2, 25 and 31, either directly or indirectly, and due to these dependencies and the reasons provided above, Applicant respectfully submits that these claims are novel over Li et al.

35 U.S.C. § 103 Rejections

The Examiner has rejected claims 9 and 33 under 35 U.S.C. 103(a) as being unpatentable over Li et al. in view of Raffel et al. (United States Patent Application Publication 20030050090).

In rejecting claims under 35 U.S.C. § 103(a), the Examiner bears the initial burden of establishing a prima facie case of obviousness. *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992). *See also In re Piasecki*, 745 F.2d 1468, 1472 (Fed. Cir. 1984). It is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. *See In re Fine*, 837 F.2d, 1071, 1073 (Fed. Cir. 1988). In so doing, the Examiner is expected to make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966), viz., (1) the scope and content of the prior art; (2) the differences between the prior art and the claims at issue; and (3) the level of ordinary skill in the art. Additionally, in making a rejection under 35 U.S.C. § 103(a) on the basis of obviousness, the Examiner must provide some articulated

reasoning with some rational underpinning to support the legal conclusion of obviousness. *KSR Int'l. Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1741 (2007). Only if this initial burden is met does the burden of coming forward with evidence or argument shift to the appellant. *See Oetiker*, 977 F.2d at 1445. *See also Piasecki*, 745 F.2d at 1472. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. *See Oetiker*, 977 F.2d at 1445; *Piasecki*, 745 F.2d at 1472.

Applicant's analysis below demonstrates that the Examiner has failed to fulfil the initial burden for a finding of obviousness under 35 U.S.C. 103.

Applicant submits that claims 9 and 33 of the present application are patentable over Li et al. and Raffel et al., as the Examiner has not properly determined the differences between the claimed invention and the prior art. Furthermore, the Examiner has not provided a valid explanation to support an obviousness rejection under 35 U.S.C. 103. Applicant's reasoning is detailed below.

Differences between the claimed invention and the prior art

The following is a discussion of how the cited references do not disclose all the elements of the rejected claim. While it may be considered that "the mere existence of differences between prior art and an invention does not establish the invention's non-obviousness", Office personnel must explain why the difference(s) between the prior art and the claimed invention would have been obvious to one skilled in the art (Examination Guidelines for Determining Obviousness Under 35 U.S.C. 103 in View of the Supreme Court Decision in *KSR International Co. v. Teleflex Inc.*, published in Federal Register Vol. 72, No. 195 October 10, 2007). As such, if elements from a claim are not disclosed by the combination of cited references and no valid reasoning is provided why the missing elements would be obvious, this may provide a strong basis for why a claim should not be rejected based on obviousness.

Claims 9 and 33 are dependent upon claims 2 and 31, respectively, either directly or indirectly. Applicant submits that Raffel et al. does not disclose the limitations alleged to be disclosed by Li et al, but which are not taught by Li et al. For at least their dependence upon

claims 2 and 31, Applicant submits that Li et al. and Raffel et al. do not teach all the limitations of claims 9 and 33, as discussed above with regard to the rejection of claims 2 and 31.

Furthermore, claim 9 is dependent upon claim 8 and recites the further limitation “the states for PMP communications comprise dormant, standby and active, and wherein P2P communications are permitted when the mobile station is in one of the PMP states dormant and standby”. The Examiner alleges that this limitation is disclosed in Raffel et al. on page 8, paragraph [0065]. Applicant submits that Raffel et al. does not disclose “P2P communications are permitted when the mobile station is in one of the PMP states dormant and standby”. The paragraph indicated by the Examiner discloses more than one mobile station handset 12 registered with a cordless cellular base station 10 able to answer an incoming call over a landline to the cordless cellular base station 10. There is no suggestion or disclosure of two mobile station handsets 12 communicating using P2P, let alone communicating during dormant and standby PMP states. At best, Raffel et al. discloses more than one handset may be connected to a call through the cordless cellular base station, but not connected in a P2P manner.

Claim 8, upon which claim 9 depends, and claim 33 recite “maintaining linked state transitions between states for PMP communications and at least one state for P2P communications”, which the Examiner alleges is disclosed in Raffel et al. on page 8, paragraph [0065]. As mentioned above, there is no suggestion or disclosure of two mobile station handsets 12 in Raffel et al. communicating using P2P, and as such Applicant submits there is no reason why Raffel et al. would maintain “linked state transitions between states for PMP communications and at least one state for P2P communications” (emphasis added).

For at least the reasons discussed above, Applicant submits that there are differences between what is disclosed in Li et al. and Raffel et al. and that which is disclosed in claims 9 and 33 resulting in a clear lack of at least one limitation in the combination of Li et al. and Raffel et al. that is alleged to equate to the limitations recited in the claims. Furthermore, the Examiner has not provided a suitable reason why the missing limitations would be obvious to one skilled in the art.

Explanation to support an obviousness rejection

As noted above, for the Patent Office to properly combine references in support of an obviousness rejection, the Patent Office must identify a reason why a person of ordinary skill in the art would have sought to combine the respective teachings of the applied references. Applicant appreciates that the Examiner has articulated a reason why the claimed invention would have been obvious. However, for reasons detailed below, the Examiner's articulated reason can not be regarded as being valid.

Applicant notes that the examination guidelines that issued on October 10, 2007 indicate that "the gap between the prior art and the claimed invention may not be 'so great' as to render the [claim] non-obvious to one reasonably skilled in the art." As noted above, Raffel et al. has nothing to do with P2P communications. Raffel et al. is directed to a cordless cellular base station, which is connected to a landline or a PSTN, communicating with a cellular network compatible mobile unit. Once the mobile unit is communicating with the cordless cellular base station, the cordless cellular base station communicates with the cellular network to instruct the cellular network to route all calls for mobile identification number to the cordless cellular base station's landline number. Thus, it would appear that the gap between the prior art and the claimed invention is too great to render the claimed invention obvious to one reasonably skilled in the art.

In addition, the Examiner has at least in part based his reasons for combining the references on the characterization of Raffel et al., which Applicant indicates above is incorrect. As the underlying basis of why the references was combined is flawed, this is further evidence that the reason put forth by the Examiner for combining the references does not establish a prima facie case of obviousness.

Furthermore with regard to claim 9, the Examiner alleges that "It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above combination including the states for PMP communications comprise dormant, standby and active in order to provide a multiple mode for a mobile device". Due to the lack of all of the limitations of claim 9 being found in the combination of references and no clear indication why such

limitations would be known to one skilled in the art, Applicant submits that it would not be obvious, as alleged by the Examiner, for one skilled in the art to consider the combination of cited references and arrive at the claimed invention.

For at least the above reasons, Applicant submits that the Examiner has failed to establish a prime facie case of obviousness and it is respectfully requested that the Examiner reconsider and withdraw the rejection.

Similar arguments apply to claim 33, and as such Applicant submits that claim 33 patentably distinguishes over the combination of Li et al. and Raffel et al.

The Examiner has rejected claims 19, 20 and 24 under 35 U.S.C. 103(a) as being unpatentable over Li et al. in view of Karr et al. (United States Patent Application Publication 20040102215).

Applicant's analysis below demonstrates that the Examiner has failed to fulfil the initial burden for a finding of obviousness under 35 U.S.C. 103.

Amended claims 19 and 24 are dependent upon claim 2. Claim 20 is dependent upon amended claim 19. Applicant submits that Karr et al. does not disclose the limitations alleged to be disclosed by Li et al, but which are not taught by Li et al. For at least their dependence upon claim 2, Applicant submits that Li et al. and Karr et al. do not teach all the limitations of claims 19, 20 and 24, as discussed above with regard to the rejection of claim 2.

The Examiner alleges that Karr et al. discloses the limitations of claims 19 and 20 at page 6, paragraph [0066]. Applicant does not agree with the Examiner's characterization of the prior art. Applicant submits that there is no suggestion or disclosure of what is recited in claims 19 and 20 in paragraph [0066].

The Examiner alleges that Karr et al. discloses the limitation of claim 24 at page 3, paragraph [0032]. This particular portion of Karr et al. merely discloses a DSP dispatch function passing a series of commands to the RTD. These commands include "the frequency, antenna tuning parameters, duration of capture, and start time." There is no suggestion or disclosure that "antenna tuning" includes steering of an antenna for use in P2P communications or PMP

communications, as recited in claim 24. Applicant submits that antenna tuning is described on page 2, paragraph [0020] and does not including steering of the antenna.

For at least the reasons discussed above, Applicant submits that there are differences between what is disclosed in Li et al. and Karr et al. and that which is disclosed in claims 19, 20 and 24 resulting in a clear lack of at least one limitation in the combination of Li et al. and Karr et al. that is alleged to equate to the limitations recited in the claims. Furthermore, the Examiner has not provided a suitable reason why the missing limitations would be obvious to one skilled in the art.

Furthermore, Karr et al. does not suggest or disclose using a cellular resource for peer-to-peer communications. Likewise, Karr et al. does not discuss the use of CDMA or OFDM signals to achieve PMP and P2P communications. Due to the differences between what is disclosed in Karr et al., Li et al. and the claimed invention, Applicant submits that the gap between the prior art and the claimed invention is too great to render the claimed invention obvious to one reasonably skilled in the art.

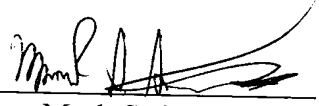
The Examiner has at least in part based his reasons for combining the references on the characterization of Karr et al., which Applicant indicates above is incorrect. As the underlying basis of why the references was combined is flawed, this is further evidence that the reason put forth by the Examiner for combining the references does not establish a prima facie case of obviousness.

For at least the above reasons, Applicant submits that the Examiner has failed to establish a prime facie case of obviousness and it is respectfully requested that the Examiner reconsider and withdraw the 35 U.S.C. 103(a) rejection of the claims.

In view of the foregoing, early favorable consideration of this application is earnestly solicited.

Respectfully submitted,

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